

Product Data Sheet

Product Name: Myristic acid- 13 C 2

Cat. No.: GC80846

Chemical Properties

Cas. No. 287111-20-0

Formula $C_{12}^{13}C_2H_{28}O_2$

M.Wt 230.36

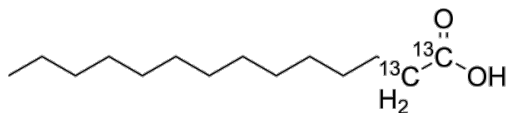
Solubility

Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

Myristic acid - 13 C 2 is the 13 C-labeled Myristic acid. Myristic acid is an orally active saturated 14-carbon fatty acid found in most animal and plant fats, especially milk fat coconut oil, palm oil and nutmeg oil. Myristic acid exerts anti-inflammatory activity through the NF-κB pathway. Myristic acid has antibacterial, anti-inflammatory and analgesic properties [1] [2] [3] [4].

In Vitro, Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of

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drugs.

References:

- [1]. Hu M, et al. Myristic acid regulates triglyceride production in bovine mammary epithelial cells through the ubiquitination pathway. *Agriculture*, 2023, 13(10): 1870.
- [2]. Oepen K, et al. Myristic Acid Inhibits the Activity of the Bacterial ABC Transporter BmrA. *Int J Mol Sci*. 2021 Dec 17;22(24):13565.
- [3]. Alonso-Castro AJ, et al. Myristic acid reduces skin inflammation and nociception. *J Food Biochem*. 2022 Jan;46(1):e14013.
- [4]. Huang Q, et al. Anti-inflammatory effects of myristic acid mediated by the NF- κ B pathway in lipopolysaccharide-induced BV-2 microglial cells. *Mol Omics*. 2023 Oct 30;19(9):726-734.

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